

PATENT COOPERATION TREATY
PCT

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY**
(Chapter II of the Patent Cooperation Treaty)
(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 10003508W001	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/JP2004/012776	International filing date (day/month/year) 27.08.2004	Priority date (day/month/year) 01.09.2003	
International Patent Classification (IPC) or national classification and IPC Int.Cl. 7 H04N1/00			
Applicant CANON KABUSHIKI KAISHA			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.	
3. This report is also accompanied by ANNEXES, comprising:	
a. <input checked="" type="checkbox"/> a total of <u>9</u> sheets, as follows:	
<input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).	
<input checked="" type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.	
b. <input type="checkbox"/> a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4. This report contains indications relating to the following items:	
<input checked="" type="checkbox"/> Box No. I Basis of the report	
<input type="checkbox"/> Box No. II Priority	
<input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	
<input type="checkbox"/> Box No. IV Lack of unity of invention	
<input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
<input type="checkbox"/> Box No. VI Certain documents cited	
<input type="checkbox"/> Box No. VII Certain defects in the international application	
<input type="checkbox"/> Box No. VIII Certain observations on the international application	

Date of submission of the demand 27.06.2005	Date of completion of this report 03.08.2005
Name and mailing address of the IPEA/JP Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer Teruhisa Chiba Telephone No. +81-3-3581-1101 Ext. 3571
5V 8938	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT / JP2004/012776

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

- international search (under Rules 12.3 and 23.1(b))
- publication of the international application (under Rule 12.4)
- international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished

the description:

pages 1-48 _____ as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

the claims:

pages 1-12 _____ as originally filed/furnished

pages* _____ as amended (together with any statement) under Article 19

pages* 13-15 _____ received by this Authority on 27.06.2005

pages* _____ received by this Authority on _____

the drawings:

pages 1-14 _____ as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:

the description, pages _____

the claims, Nos. _____

the drawings, sheets/figs _____

the sequence listing (specify): _____

any table(s) related to sequence listing (specify): _____

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages 10, 11 _____

the claims, Nos. 1, 5, 9 _____

the drawings, sheets/figs _____

the sequence listing (specify): _____

any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/012776

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- the entire international application
 claims Nos. 13-15

because:

- the said international application, or the said claims Nos. _____ relate to the following subject matter which does not require an international preliminary examination (*specify*):

- the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 13-15 are so unclear that no meaningful opinion could be formed (*specify*):

Although Claim 13(14,15) is dependent on Claim 1(5,9), the subject matter described in Claim 13(14,15) is not conformity with that of Claim 1(5,9).

- the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed.
- no international search report has been established for said claims Nos. _____.
- the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
- | | |
|----------------------------|---|
| the written form | <input type="checkbox"/> has not been furnished
<input type="checkbox"/> does not comply with the standard |
| the computer readable form | <input type="checkbox"/> has not been furnished
<input type="checkbox"/> does not comply with the standard |
- the tables related to the nucleotide and/or amino acid sequence listing do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions in that the computer readable form:
- | |
|---|
| <input type="checkbox"/> has not been furnished
<input type="checkbox"/> does not comply with the technical requirements |
|---|
- See Supplemental Box for further details.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/012776**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	<u>1-12</u>	YES
	Claims	_____	NO
Inventive step (IS)	Claims	<u>1-12</u>	YES
	Claims	_____	NO
Industrial applicability (IA)	Claims	<u>1-12</u>	YES
	Claims	_____	NO

2. Citations and explanations(Rule 70.7)

D1:JP 2000-354127 A (Ricoh Co.),2000.12.19

D2:JP 9-247334 A (Sanyo electric),1997.09.19

The subject matter of claim 1-12 is neither disclosed in any of the documents(D1,D2) cited in the ISR nor obvious to a person skilled in the art.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/012776

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box No. I 4.

The amendment to delete the word "a digital encoding method of digital encoding means is switched to a digital encoding method suitable for the facsimile modulating method," from claim 1,5,9 is considered to go beyond the disclosure as originally filed.

- if the opponent station has an IP address, there is selected a first image communicating procedure by which the image data is not facsimile-modulated but sent and received to/from the opponent station on an 5 IP network on the basis of a predetermined IP communication protocol by using the IP address of the opponent station obtained from a predetermined server on the basis of a telephone number of the opponent station, and
- 10 if the opponent station does not have the IP address, there is selected a second image communicating procedure by which the image data is facsimile-modulated by a predetermined facsimile modulating method, an analog facsimile signal 15 obtained by the facsimile modulation is digitally encoded by the digital encoding means, and subsequently, the digital coded signal is sent to the opponent station through a media gateway for executing analog/digital signal conversion between 20 the IP network and a public line network.

By using the characteristic construction as mentioned above, according to the invention, the following advantages are obtained: a large amount of image data can be sent to the opponent station at a

SUPERSEDED PEPLACEMENT SHEET (RULE 70.16(b))

AMENDED SHEET (ARTICLE 34)

high speed by using the first image communicating procedure without using the facsimile procedure, and when the image communication is made by the second image communicating procedure, the image communication can be made with the opponent station through the media gateway.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram showing a construction of a network system including image communicating apparatuses using the invention.

Fig. 2A is a block diagram showing an internal construction of the image communicating apparatus using the invention.

Fig. 2B is a block diagram showing an internal construction of a conventional image communicating apparatus.

Fig. 3A is an explanatory diagram showing a communication sequence for sending an image from an image communicating apparatus 104 in Fig. 1 to an image communicating apparatus 107.

Fig. 3B is an explanatory diagram showing a communication sequence for sending an image from the image communicating apparatus 104 in Fig. 1 to an image communicating apparatus 112.

IPEA/JP 27.6.2005

CLAIMS

1. (amended) A communicating apparatus for digitally encoding a speech signal by digital encoding means and sending the coded signal to an opponent station, thereby making VoIP speech communication and sending and receiving image data to/from the opponent station, comprising:
 - 5 communication control means for, when image data is sent to the opponent station,
 - 10 if the opponent station has an IP address, selecting a first image communicating procedure by which the image data is not facsimile-modulated but sent and received to/from the opponent station on an IP network on the basis of a predetermined IP communication protocol by using the IP address of the
 - 15 opponent station obtained from a predetermined server on the basis of a telephone number of the opponent station, and
 - 20 if the opponent station does not have the IP address, selecting a second image communicating procedure by which the image data is facsimile-modulated by a predetermined facsimile modulating method, an analog facsimile signal obtained by said facsimile modulation is digitally encoded by said
 - 25 digital

SUPERSEDED PEPLACEMENT SHEET(RULE70.16(b))

AMENDED SHEET(ARTICLE34)

encoding means, and subsequently, the digital coded signal is sent to the opponent station through a media gateway for executing analog/digital signal conversion between the IP network and a public line 5 network.

2. A communicating apparatus according to claim 1, wherein in said second image communicating procedure, the digital encoding method of said digital encoding means is switched to the digital 10 encoding method suitable for said facsimile modulating method, and a tone signal necessary for a facsimile communication procedure or the facsimile-modulated transmission image data is inputted to said digital encoding means.

15 3. A communicating apparatus according to claim 1, wherein when the image data is sent to the opponent station, which one of said first and second image communicating procedures is used is determined by analyzing the telephone number of the opponent 20 station.

25 4. A communicating apparatus according to claim 1, wherein in said VoIP speech communication, the digital encoding method of said digital encoding means is selected on the basis of negotiation which is performed on the basis of a VoIP protocol.

5. (amended) A control method of a communicating apparatus for digitally encoding a speech signal by

~~AMENDED PEPLACEMENT SHEET(RULE70.16(b))~~

AMENDED SHEET(ARTICLE34)

digital encoding means and sending the coded signal to an opponent station, thereby making VoIP speech communication and sending and receiving image data to/from the opponent station, wherein:

- 5 when image data is sent to the opponent station, if the opponent station has an IP address, there is selected a first image communicating procedure by which the image data is not facsimile-modulated but sent and received to/from the opponent station on an IP network on the basis of a predetermined IP communication protocol by using the IP address of the opponent station obtained from a predetermined server on the basis of a telephone number of the opponent station, and
- 10 if the opponent station does not have the IP address, there is selected a second image communicating procedure by which the image data is facsimile-modulated by a predetermined facsimile modulating method, an analog facsimile signal obtained by said facsimile modulation is digitally encoded by said digital encoding means, and subsequently, the digital coded signal is sent to the opponent station through a media gateway for executing analog/digital signal conversion between
- 15
- 20

the IP network and a public line network.

6. A control method of the communicating apparatus according to claim 5, wherein in said second image communicating procedure, the digital encoding method of said digital encoding means is switched to the digital encoding method suitable for said facsimile modulating method, and a tone signal necessary for a facsimile communication procedure or facsimile-modulated transmission image data is inputted to said digital encoding means.

7. A control method of the communicating apparatus according to claim 5, wherein when the image data is sent to the opponent station, which one of said first and second image communicating procedures is used is determined by analyzing the telephone number of the opponent station.

8. A control method of the communicating apparatus according to claim 5, wherein in said VoIP speech communication, the digital encoding method of said digital encoding means is selected on the basis of negotiation which is performed on the basis of a VoIP protocol.

9. (amended) A control program of a communicating apparatus for digitally encoding a speech signal by digital encoding means and sending the coded signal to an opponent station, thereby making VoIP speech communication and sending and receiving image data

to/from the opponent station, comprising:

a control step of, when image data is sent to the opponent station,

if the opponent station has an IP address,

- 5 selecting a first image communicating procedure by which the image data is not facsimile-modulated but sent and received to/from the opponent station on an IP network on the basis of a predetermined IP communication protocol by using the IP address of the 10 opponent station obtained from a predetermined server on the basis of a telephone number of the opponent station, and

- if the opponent station does not have the IP address, selecting a second image communicating 15 procedure by which the image data is facsimile-modulated by a predetermined facsimile modulating method, an analog facsimile signal obtained by said facsimile modulation is digitally encoded by said digital encoding means, and subsequently, the digital 20 coded signal is sent to the opponent station through a media gateway for executing analog/digital signal conversion between the IP network and a public line network.

10. A control program of the communicating

apparatus, according to claim 9, wherein in said second image communicating procedure, the digital encoding method of said digital encoding means is switched to the digital encoding method suitable for 5 said facsimile modulating method, and a tone signal necessary for a facsimile communication procedure or facsimile-modulated transmission image data is inputted to said digital encoding means.

11. A control program of the communicating 10 apparatus, according to claim 9, wherein when the image data is sent to the opponent station, which one of said first and second image communicating procedures is used is determined by analyzing the telephone number of the opponent station.

15 12. A control program of the communicating apparatus, according to claim 9, wherein in said VoIP speech communication, the digital encoding method of said digital encoding means is selected on the basis of negotiation which is performed on the basis of a 20 VoIP protocol.

13. (new) A communicating apparatus according to claim 1, wherein in the second image communication procedure, said communication control means switches the digital encoding method of said digital encoding 25 means to a digital encoding method suitable for said facsimile modulating method, and causes said digital encoding means to digitally encode an analog

facsimile signal obtained by said facsimile modulation.

14. (new) A control method of communicating apparatus according to claim 5, wherein in the second 5 image communication procedure, the digital encoding method of said digital encoding means is switched to a digital encoding method suitable for said facsimile modulating method, and said digital encoding means digitally encodes an analog facsimile signal obtained 10 by said facsimile modulation.

15. (new) A control program of communicating apparatus according to claim 9, wherein in the second image communication procedure, the digital encoding 15 method of said digital encoding means is switched to a digital encoding method suitable for said facsimile modulating method, and said digital encoding means digitally encodes an analog facsimile signal obtained by said facsimile modulation.